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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,135	07/31/2003	Siew Loong Chow	2060-01700	3944
23505	7590	05/24/2004	EXAMINER	
CONLEY ROSE, P.C. P. O. BOX 3267 HOUSTON, TX 77253-3267			RAMIREZ, RAMON O	
			ART UNIT	PAPER NUMBER
			3632	

DATE MAILED: 05/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/631,135	Applicant(s) CHOW ET AL.	
	Examiner RAMON O. RAMIREZ	Art Unit 3632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19 and 20 is/are allowed.
- 6) ☒ Claim(s) 1, 11, 14 and 21-23 is/are rejected.
- 7) ☒ Claim(s) 2-10, 12, 13 and 15-18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/7/03</u> . | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

This is the first Office Action corresponding to original filing. Claims 1-23 are active.

Information Disclosure Statement

Receipt is acknowledged of Information Disclosure Statement filed Nov 17, 2003, which has been reviewed by the Examiner.

Drawings

The drawings are objected to because the following elements are not labeled: pulley body 260, circular gear 266, fifth pulley (348) and arm lengths L3 and L4 (see page 20 line 4).

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

Claims 21-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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These claims lack antecedent for the elements included in the equation. For example, the angle and a definition of the constants. Constants of what?

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 11 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Hintsch (Pat No 4,230,210).

The patent to Hintsch shows two cams (3, 4) each having a non-circular surface rotatable between them and at least one spring means (19) in one of the cams. Please note that the arm is not a positive element of the claims and consequently has no patentable significance.

Allowable Subject Matter

Claims 3-10, 12, 13, and 15-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 19 and 20 are allowed over the art of record.

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The following is a statement of reasons for the indication of allowable subject matter: none of the art of record discloses a gravity compensated rotatable member comprising in addition to the elements recited in claims 19 and 20, a spring biasing the first rotatable bodies, shaped such that the combined torques on the members from the first and second circular surface portions, due to the tensions in the first cables, compensate for the moments on the members due to gravity.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sounder, Jr. et al. (4,266,747), Moorhouse (4,311,338) and Ihalainen et al. (6,732,988) show gravity compensating mechanisms. Patent application publication No US 2004/0064947 A1 to Yanagimoto et al. shows two gear members having rotatable non-circular surfaces.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner **Ramírez** at telephone number (703) 308-0748. The examiner can be normally reached on Monday-Thursday and alternate Fridays.


The fax numbers for this Group are (703) 872-9306 (official papers), and (703) 308-3519 (unofficial papers).

Any inquiry of general nature relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1113.

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A shortened period for response to this Office Action expires THREE MONTHS
from the mailing date of this action.

R.O. RAMIREZ
May 18, 2004



RAMON O. RAMIREZ
PRIMARY EXAMINER
TECHNOLOGY CENTER 3600
ART UNIT 3632